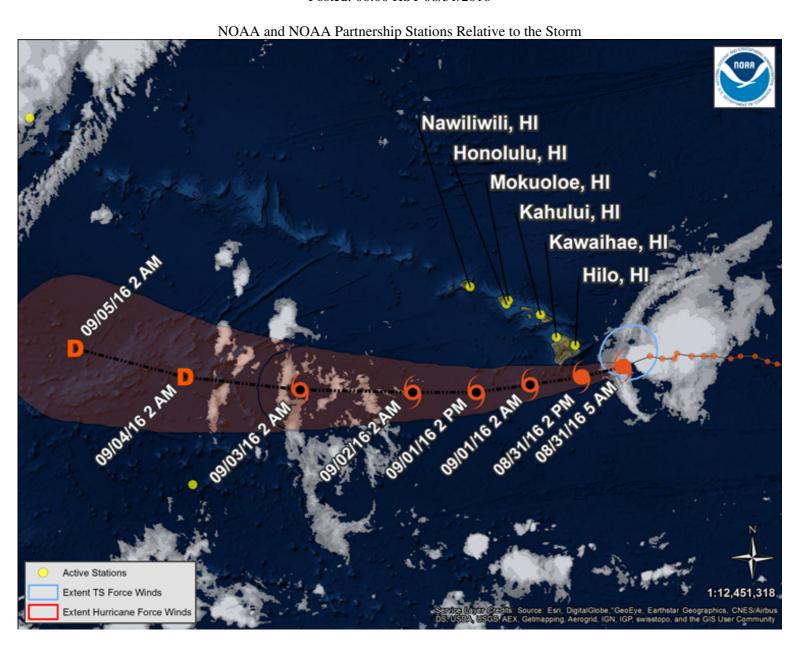




Hurricane MADELINE QuickLook Posted: 06:00 HST 08/31/2016



Storm Analysis

As of 8/31/2016 06:00 HST, water levels across the Hawaiian Islands are slightly elevated and range between 0.3 and 0.7 feet above normal tide levels. Winds are generally 20 knots or less with slightly higher gusts to 25 knots on the windward facing shores of the Island of Hawai'i and Maui. Barometric pressure is slowly beginning to fall across the Hawaiian Islands.

Water Level and Meteorological plots available below are updated automatically. A line denoting <u>Mean Higher High Water</u> (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional data, please see the <u>Center for Operational Oceanographic Products & Services</u> website. For more information or archived products and reports, please see the <u>Storm QuickLook</u> Homepage.

Analyst:ADM

SELECT CENTRAL PACIFIC HURRICANE CENTER ADVISORY INFORMATION:

HURRICANE MADELINE ADVISORY NUMBER 21 NWS CENTRAL PACIFIC HURRICANE CENTER HONOLULU HI 500 AM HST WED AUG 31 2016

...MADELINE WEAKENS AS IT DRAWS CLOSER TO HAWAII...

...STILL A CATEGORY ONE HURRICANE...

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY:

A Tropical Storm Warning has been issued for Maui County, including the islands of Maui, Molokai, Lanai and Kahoolawe.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Hurricane Warning is in effect for...

* Hawaii County

A Tropical Storm Warning is in effect for...

* Maui County including the islands of Maui, Molokai, Lanai and Kahoolawe

A Hurricane Warning means that hurricane conditions are expected somewhere within the warning area. A Tropical Storm Warning means that tropical storm conditions are expected somewhere within the watch area. Preparations to protect life and property should be rushed to completion.

For storm information specific to your area, please monitor products issued by the National Weather Service office in Honolulu Hawaii.

DISCUSSION AND 48-HOUR OUTLOOK

At 500 AM HST, the center of Hurricane Madeline was located ABOUT 140 MI ESE OF HILO HAWAII and ABOUT 355 MI ESE OF HONOLULU HAWAII. Madeline is moving toward the west near 14 mph and this general motion is expected to continue for the next couple of days. On the forecast track, the center of Madeline will pass dangerously close to the Big Island later today.

Maximum sustained winds are near 80 mph with higher gusts. Steady weakening is forecast during the next 48 hours, and Madeline is forecast to weaken to a tropical storm tonight or Thursday.

Hurricane-force winds extend outward up to 10 miles from the center and tropical-storm-force winds extend outward up to 125 miles.

The estimated minimum central pressure is 988 mb.

HAZARDS AFFECTING LAND

WIND: Hurricane conditions are expected to develop over Hawaii County later today, continuing into early Thursday. Tropical storm conditions are expected to develop over Maui County later today, continuing into early Thursday.

SURF: Swells generated by Madeline are expected to increase in Hawaiian waters today, possibly becoming damaging along east facing shores of Hawaii County and the Island of Maui today and tonight.

RAIN: Madeline is expected to produce total rain accumulations of 5 to 10 inches, with isolated maximum amounts near 15 inches, across Hawaii County, especially over windward portions. Total rainfall accumulations of 1 to 3 inches, with isolated maximum amounts up to 4 inches, can be expected in the islands of Maui County. This rainfall may lead to dangerous flash floods and mudslides.

STORM SURGE: Depending on the track of Madeline, the combination of storm surge and tides could cause normally dry areas near the coast to become flooded. The water could reach 1 to 3 feet above ground if peak surge were to coincide with high tide. The surge would be accompanied by large damaging surf and can vary over short distances.

NEXT ADVISORY

Next intermediate advisory at 800 AM HST. Next complete advisory at 1100 AM HST.

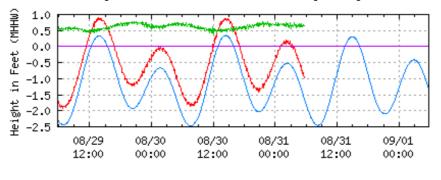
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Forecaster Birchard

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: Hilo, Hilo Bay, Kuhio Bay - Water Level, Hilo, Hilo Bay, Kuhio Bay - Winds, Hilo, Hilo Bay, Kuhio Bay - Barometric, Kawaihae - Water Level, Kawaihae - Winds, Kawaihae - Barometric, Kahului, Kahului Harbor - Water Level, Kahului, Kahului Harbor - Water Level, Mokuoloe - Water Level, Mokuoloe - Water Level, Honolulu - Winds, Honolulu - Barometric, Nawiliwili - Water Level, Nawiliwili - Winds, Nawiliwili - Barometric

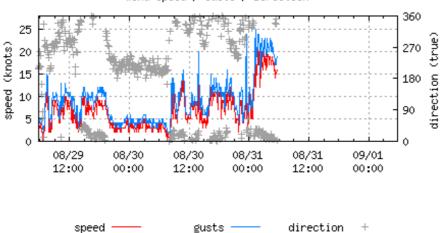
NOAA/NOS/CO-OPS <u>1617760 Hilo, Hilo Bay, Kuhio Bay, HI</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide (Obs-Pred) (Obs-Pred) MHHW

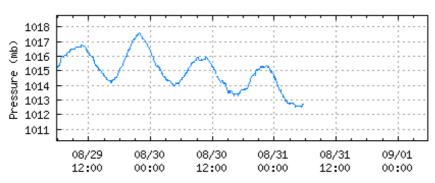
Last Observed Sample: 08/31/2016 05:42 (HST). Data relative to MHHW Observed: -1.01 ft. Predicted: -1.67 ft. Residual: 0.66 ft. Historical Maximum Water Level: Jan 20 1981, 1.37 ft. Next High Tide: 08/31/2016 14:56 (HST), 0.31 ft.

NOAA/NOS/CO-OPS 1617760 Hilo, Hilo Bay, Kuhio Bay, HI Wind Speed / Gusts / Direction



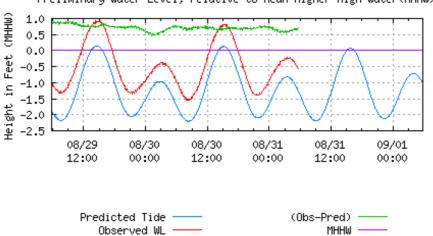
Last Observed Sample: 08/31/2016 05:42 (HST) Wind Speed: 18 knots Gusts: 20 knots Direction: 6° T

NOAA/NOS/CO-OPS <u>1617760 Hilo, Hilo Bay, Kuhio Bay, HI</u> Barometric Pressure

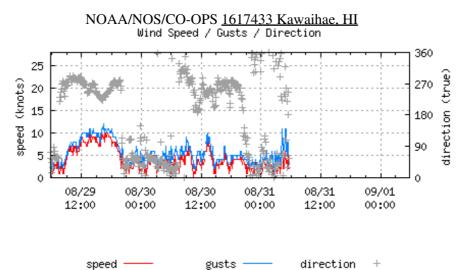


barometric pressure ——
Last Observed Sample: 08/31/2016 05:42 (HST)
Barometric Pressure: 1012.8 mb

NOAA/NOS/CO-OPS <u>1617433 Kawaihae</u>, <u>HI</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)

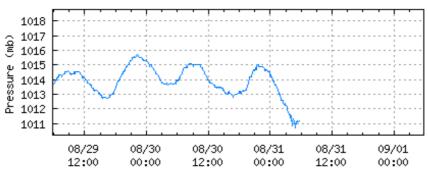


Last Observed Sample: 08/31/2016 05:42 (HST). Data relative to MHHW Observed: -0.57 ft. Predicted: -1.29 ft. Residual: 0.72 ft. Historical Maximum Water Level: Dec 13 2008, 1.22 ft. Next High Tide: 08/31/2016 15:46 (HST), 0.08 ft.



Last Observed Sample: 08/31/2016 05:42 (HST) Wind Speed: 4 knots Gusts: 6 knots Direction: 60° T

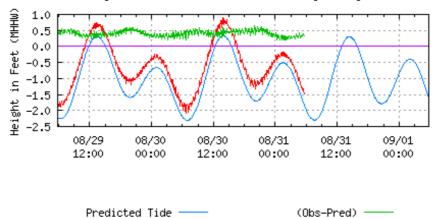
NOAA/NOS/CO-OPS <u>1617433 Kawaihae, HI</u> Barometric Pressure



barometric pressure ----

Last Observed Sample: 08/31/2016 05:42 (HST)
Barometric Pressure: 1011.2 mb

NOAA/NOS/CO-OPS 1615680 Kahului, Kahului Harbor, HI Preliminary Water Level, relative to Mean Higher High Water(MHHW)



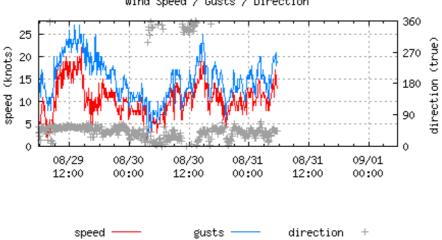
Last Observed Sample: 08/31/2016 05:42 (HST). Data relative to MHHW Observed: -1.56 ft. Predicted: -1.87 ft. Residual: 0.31 ft.

MHHW

Observed WL

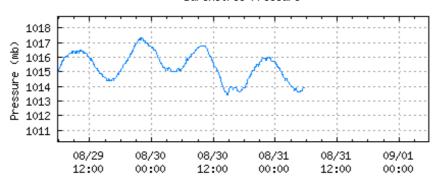
Historical Maximum Water Level: Dec 20 1968, 1.23 ft. Next High Tide: 08/31/2016 14:23 (HST), 0.31 ft.

NOAA/NOS/CO-OPS 1615680 Kahului, Kahului Harbor, HI Wind Speed / Gusts / Direction



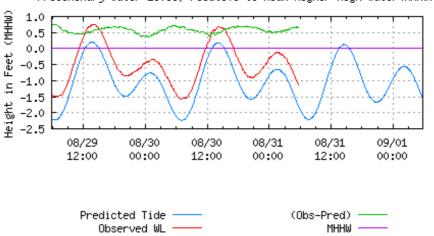
Last Observed Sample: 08/31/2016 05:42 (HST) Wind Speed: 13 knots Gusts: 17 knots Direction: 37° T

NOAA/NOS/CO-OPS 1615680 Kahului, Kahului Harbor, HI Barometric Pressure

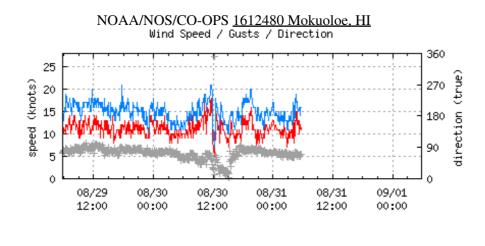


barometric pressure ——
Last Observed Sample: 08/31/2016 05:42 (HST)
Barometric Pressure: 1013.9 mb

$NOAA/NOS/CO-OPS~\underline{1612480~Mokuoloe, HI}\\ Preliminary~Water~Level,~relative~to~Mean~Higher~High~Water(MHHW)$

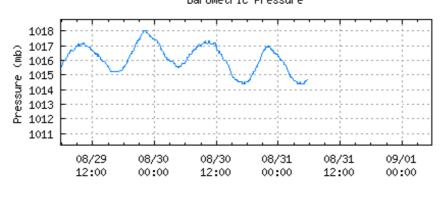


Last Observed Sample: 08/31/2016 05:42 (HST). Data relative to MHHW Observed: -1.16 ft. Predicted: -1.81 ft. Residual: 0.65 ft. Historical Maximum Water Level: Jan 8 1974, 1.46 ft. Next High Tide: 08/31/2016 14:31 (HST), 0.13 ft.



speed — gusts — direction + Last Observed Sample: 08/31/2016 05:42 (HST) Wind Speed: 10 knots Gusts: 15 knots Direction: 69° T

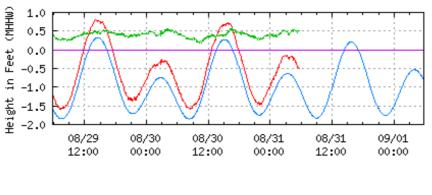
NOAA/NOS/CO-OPS <u>1612480 Mokuoloe</u>, <u>HI</u> Barometric Pressure



barometric pressure ----

Last Observed Sample: 08/31/2016 05:42 (HST)
Barometric Pressure: 1014.7 mb

NOAA/NOS/CO-OPS <u>1612340 Honolulu, HI</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)

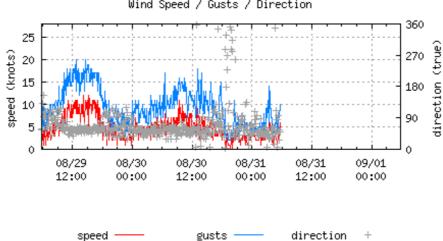


Predicted Tide (Obs-Pred) (Obs-Pred) MHHW (MHHW)

Last Observed Sample: 08/31/2016 05:42 (HST). Data relative to MHHW Observed: -0.50 ft. Predicted: -1.05 ft. Residual: 0.55 ft. Historical Maximum Water Level: Feb 14 1967, 1.49 ft.

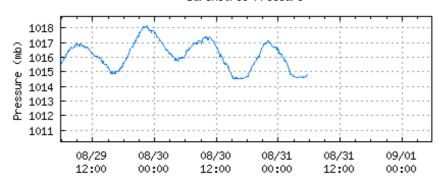
Next High Tide: 08/31/2016 15:44 (HST), 0.21 ft.

NOAA/NOS/CO-OPS <u>1612340 Honolulu, HI</u> Wind Speed / Gusts / Direction



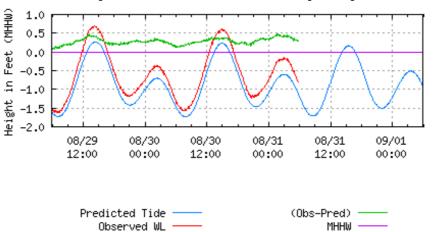
Last Observed Sample: 08/31/2016 05:42 (HST) Wind Speed: 2 knots Gusts: 8 knots Direction: 34° T

NOAA/NOS/CO-OPS <u>1612340 Honolulu, HI</u> Barometric Pressure

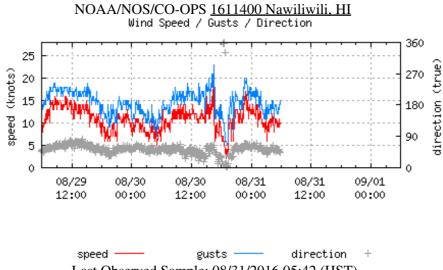


barometric pressure ——
Last Observed Sample: 08/31/2016 05:42 (HST)
Barometric Pressure: 1014.7 mb

NOAA/NOS/CO-OPS 1611400 Nawiliwili, HI Preliminary Water Level, relative to Mean Higher High Water(MHHW)

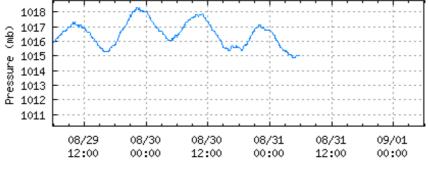


Last Observed Sample: 08/31/2016 05:42 (HST). Data relative to MHHW Observed: -0.81 ft. Predicted: -1.11 ft. Residual: 0.30 ft. Historical Maximum Water Level: Sep 11 1992, 3.15 ft. Next High Tide: 08/31/2016 15:31 (HST), 0.16 ft.



Last Observed Sample: 08/31/2016 05:42 (HST) Wind Speed: 10 knots Gusts: 15 knots Direction: 44° T

NOAA/NOS/CO-OPS 1611400 Nawiliwili, HI Barometric Pressure



barometric pressure

Last Observed Sample: 08/31/2016 05:42 (HST) Barometric Pressure: 1015.0 mb

Latest Water Level Observations on MHHW

Station ID	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
1617760	Hilo, Hilo Bay, Kuhio Bay, HI	08/31/2016 05:42 (HST)	-1.01 ft	-1.67 ft	0.66 ft	0.88 ft
1617433	Kawaihae, HI	08/31/2016 05:42 (HST)	-0.57 ft	-1.29 ft	0.72 ft	0.82 ft
1615680	Kahului, Kahului Harbor, HI	08/31/2016 05:42 (HST)	-1.56 ft	-1.87 ft	0.31 ft	0.91 ft
1612480	Mokuoloe, HI	08/31/2016 05:42 (HST)	-1.16 ft	-1.81 ft	0.65 ft	0.69 ft
1612340	Honolulu, HI	08/31/2016 05:42 (HST)	-0.50 ft	-1.05 ft	0.55 ft	0.72 ft
1611400	Nawiliwili, HI	08/31/2016 05:42 (HST)	-0.81 ft	-1.11 ft	0.30 ft	0.61 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS) National Oceanic and Atmospheric Administration | U.S. Department of Commerce